

## REMARKS

Claims 1-29 are pending in this patent application. The amendments to claim 1 relating to variable  $R_2$  find support, for example, in Example 31 of the present specification.

Claims 1-29 stand provisionally rejected under 35 U.S.C. § 101 as allegedly claiming the same invention as that defined by the claims of co-pending application Serial No. 08/464,953. Applicants request that resolution of this rejection be deferred pending identification of allowable subject matter in the present patent application.

Claims 1-15 and 36-39 stand rejected under 35 U.S.C. § 112, second paragraph, for alleged indefiniteness. The Office Action asserts that it is not clear whether the 3'- and 5'- substituents recited in these claims can be part of an internucleoside linkage. As a preliminary matter, Applicants note that there are no claims 36-39 in this patent application. Moreover, as to claims 1-15, Applicants believe that it would be clear to those skilled in the art reading the present specification that the recited substituents are not part of any internucleoside linkage. In spite of this, Applicants have amended the claims in the manner suggested in the Office Action to even more clearly indicate the terminal nature of the substituents. As will be noted, however, the recited substituents are "terminal" only in the sense that they do not

link two moieties; they need not be located on a terminal nucleoside within the claimed compounds.

Claims 1-29 and 36-39 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 4,910,300 ("the Urdea patent") in view of U.S. Patent No. 4,743,535 ("the Carrico patent"). Again, however, there are no claims 36-39 in this patent application. As to claims 1-15, Applicants respectfully request reconsideration of this rejection, as combination of the alleged disclosures of the Urdea and Carrico patents would not produce any claimed invention.

As noted in the Office Action, the Urdea patent discloses nothing more than a nucleoside bearing an amino group at the 5'-O-position. According to the Office Action, it would have been obvious to those of ordinary skill in the art to have inserted an alkyl group between the amino group and the 5'-O-position in view of the disclosure of the Carrico patent. Significantly, however, the Office Action points to no disclosure of an alkyl group in the Carrico patent, much less any disclosure that would have led those of ordinary skill to insert such a group between amino and 5'-O- groups in the manner proposed. Given this deficiency, the Urdea and Carrico patents cannot possibly render obvious the present claims. It is well-established that references such as these patents -- which do not actually place the claimed invention in the possession of the public -- do not provide an adequate basis for rejections entered

under § 103. *In re Payne*, 203 U.S.P.Q. 245, 255 (C.C.P.A. 1979) (references relied upon to support rejection under § 103 must place the claimed invention in the possession of the public). Accordingly, reconsideration and withdrawal of the rejection for alleged obviousness respectfully is requested.


The Office Action appears to suggest that those of ordinary skill would have been led to the proposed insertion by the Carrico patent's alleged teaching of "the non-critical nature of the various 5'-substituents for tethering labels to a nucleic acid." (Office Action at page 4). Significantly, however, the portion of the Carrico patent which the Office Action cites in support of this proposition does not appear to be directed to 5'-substituents, much less to the issue of whether groups should be inserted between oxygen and amino groups at the 5'-position. At most, the cited portion of the patent is generally directed to the insertion of groups between functionalized phosphate groups and "nucleic acid probes." This disclosure, however, is clearly unrelated to the pending claims and, accordingly, fails to render such claims obvious.

ISIS-1169

PATENT

It is believed all of the claims presently before the Examiner patentably define the invention over the prior art and are otherwise in condition for ready allowance. An early Office Action to that effect is, therefore, earnestly solicited.

Respectfully submitted,

  
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